We claim:

1. A method for restoring functionality to muscles weakened and atrophied by cerebrovascular disease comprising the steps of:

selecting the muscle to be treated;

inserting at least one electrically conductive needle into the area of the proximal motor point of said muscle;

inserting at least one electrically conductive needle into the area of the distal motor point of said muscle;

connecting the needles to a source of electricity; and,

electrically stimulating said muscle by applying an electric current through the needles to said muscle said electric current having a carrier frequency between about 2000 Hz and about 4000 Hz.

2. The method of claim 1, wherein said electric current is applied at a rate between about 40 pulses per second and about 60 pulses per second.

3. The method of claim 2, wherein each pulse has a pulse width between about 200 microseconds and about 350 microseconds.

4. The method of claim 1, further comprising the step of cycling the application of said electric current between periods of stimulation and rest.

5. The method of claim 4, wherein said electric current is cycled between periods of stimulation and rest for a period of about 5 minutes to about 15 minutes.

6. The method of claim 5, wherein during said step of cycling the application of electric current, the stimulation step is from about 5 seconds to about 50 seconds and the rest step is about 5 seconds to about 50 seconds.

7. The method of claim 4, wherein said periods of stimulation and rest continue for up to about 15 minutes.

8. The method of claim 7, wherein during said step of cycling the application of electric current, the stimulation step is from about 10 seconds and the rest step is about 10 seconds.

9. The method of claim 1, wherein the electric current is sufficient to produce a visible muscle contraction.

10. The method of claim 1, further comprising the step of identifying specific muscles requiring rehabilitation.

11. The method of claim 1, wherein said needle inserted in said proximal motor point is connected by means of a first lead to the source of electricity and said needle inserted in said distal motor point is connect by means of a second lead to the source of electricity.

12. The method of claim 1, following the steps of selecting the muscle to be treated and prior to inserting said needles, further comprising the steps of determining the proximal and distal motor points of said muscle.

13. The method of claim 10, further comprising the application of electro-conductive gel to the skin over said muscle prior to locating the proximal and distal motor points.

14. The method of claim 13, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the distal motor point until a contraction within the muscle is noted and marking said distal motor point.

15. The method of claim 13, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the proximal motor point until a contraction within the muscle is noted and marking said proximal motor point.

16. The method of claim 13, further comprising the step of removing said electro-conductive gel prior to inserting said needles into said motor points.

17. The method of claim 6, wherein said stimulation step includes a two second electric current ramp up and a two second electric current ramp down.

18. The method of claim 1, wherein said steps of inserting electrically conductive needles into the proximal and distal motor points, connecting the needles to a source of electricity, and,

electrically stimulating the muscle by applying an electric current with a frequency of about 2500 Hz is repeated about 3 times per week.

19. The method of claim 18, wherein said method is carried out for at least three months.

20. The method of claim 1, further comprising the step of administering physical therapy directed to the rehabilitation of the treated muscle.

21. The method of claim 1, wherein the cerebrovascular disease is any ischemic, anoxic, traumatic or infectious injury to the brain.

22. The method of claim 1, wherein the carrier frequency is about 2500 Hz.

23. The method of claim 1, wherein the current is applied at about 50 pulses per second.

24. The method of claim 1, wherein each pulse has a pulse width of 300 microseconds.

25. A method for restoring functionality to muscles weakened and atrophied by cerebrovascular disease comprising the steps of:

selecting the muscle to be treated;

inserting at least one electrically conductive needle into the area of the proximal motor point of said muscle;

inserting at least one electrically conductive needle into the area of the distal motor point of said muscle;

connecting the needles to a source of electricity;

electrically stimulating said muscle by applying an electric current through the needles to said muscle, the electric current having a carrier frequency between about 2000 Hz and about 4000 Hz, the current being applied at a pulses per second count between about 40 and about 60 pulses per second with each pulse having between about 200 to about 350 microsecond pulse width; and,

cycling the application of current between periods of stimulation and rest for about 5 minutes to about 15 minutes, wherein the stimulation period is about 5 seconds to about 50 seconds and the rest period is about 5 seconds to about 50 seconds.

26. The method of claim 25, wherein the electric current is sufficient to produce a visible muscle contraction.

27. The method of claim 25, further comprising the steps of determining the proximal and distal motor points of said muscle.

28. The method of claim 27, further comprising the application of electro-conductive gel to the skin over said muscle prior to locating the proximal and distal motor points.

29. The method of claim 28, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the distal motor point until a contraction within the muscle is noted and marking said distal motor point.

30. The method of claim 28, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the proximal motor point until a contraction within the muscle is noted and marking said proximal motor point.

31. The method of claim 28, further comprising the step of removing said electro-conductive gel prior to inserting said needles into said motor points.

32. The method of claim 25, wherein said stimulation step includes a two second electric current ramp up and a two second electric current ramp down.

33. The method of claim 25, wherein said steps of inserting electrically conductive needles into the proximal and distal motor points, connecting the needles to a source of electricity, and, electrically stimulating the muscle by applying an electric current with a frequency of about 2500 Hz is repeated about 5 times per week.

34. The method of claim 33, wherein said method is carried out for at least three months.

35. The method of claim 25, further comprising the step of administering physical therapy directed to the rehabilitation of the treated muscle.

36. The method of claim 25, wherein the cerebrovascular disease is any ischemic, anoxic, traumatic or infectious injury to the brain.

37. The method of claim 25, wherein the carrier frequency is about 2500 Hz.

38. The method of claim 25, wherein the current is applied at about 50 pulses per second.

39. The method of claim 25, wherein each pulse has a pulse width of 300 microseconds.

40. The method of claim 25, wherein said periods of stimulation and rest continue for up to about 15 minutes.

41. The method of claim 40, wherein during said step of cycling the application of electric current, the stimulation step is from about 10 seconds and the rest step is about 10 seconds.

42. A method for restoring functionality to muscles weakened and atrophied by cerebrovascular disease comprising the steps of:

selecting the muscle to be treated;

inserting at least one electrically conductive needle into the area of the proximal motor point of said muscle;

inserting at least one electrically conductive needle into the area of the distal motor point of said muscle;

connecting the needles to a source of electricity;

electrically stimulating said muscle by applying an electric current through the needles to said muscle, the electric current having a carrier frequency between about 2000 Hz and about 4000 Hz, the current being applied at a pulses per second count between about 40 and about 60 pulses per second with each pulse having between about 200 to about 350 microsecond pulse width; and,

cycling the application of current between periods of stimulation and rest for about 5 minutes to about 15 minutes, wherein the stimulation period is about 5 seconds to about 50 seconds and the rest period is about 5 seconds to about 50 seconds, and, wherein said stimulation period includes a 2 second current ramp up and a 2 second current ramp down.

43. The method of claim 42, wherein the electric current is sufficient to produce a visible muscle contraction.

44. The method of claim 42, further comprising the steps of determining the proximal and distal motor points of said muscle.

45. The method of claim 44, further comprising the application of electro-conductive gel to the skin over said muscle prior to locating the proximal and distal motor points.

46. The method of claim 45, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the distal motor point until a contraction within the muscle is noted and marking said distal motor point.

47. The method of claim 45, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the proximal motor point until a contraction within the muscle is noted and marking said proximal motor point.

48. The method of claim 45, further comprising the step of removing said electro-conductive gel prior to inserting said needles into said motor points.

49. The method of claim 42, wherein said steps of inserting electrically conductive needles into the proximal and distal motor points, connecting the needles to a source of electricity, and, electrically stimulating the muscle by applying an electric current with a frequency of about 2500 Hz is repeated about 5 times per week.

50. The method of claim 49, wherein said method is carried out for at least three months.

51. The method of claim 42, further comprising the step of administering physical therapy directed to the rehabilitation of the treated muscle.

52. The method of claim 42, wherein the cerebrovascular disease is any ischemic, anoxic, traumatic or infectious injury to the brain.

53. The method of claim 42, wherein the carrier frequency is about 2500 Hz.

54. The method of claim 42, wherein the current is applied at about 50 pulses per second.

55. The method of claim 42, wherein each pulse has a pulse width of 300 microseconds.

56. The method of claim 42, wherein during said step of cycling the application of electric current, the stimulation step is from about 10 seconds and the rest step is about 10 seconds.

57. A method for restoring functionality to muscles weakened and atrophied by cerebrovascular disease comprising the steps of:

selecting the muscle to be treated;

inserting at least one electrically conductive needle into the area of the proximal motor point of said muscle;

inserting at least one electrically conductive needle into the area of the distal motor points of said muscle;

connecting said needles to a source of electricity;

electrically stimulating said muscle by applying an electric current through said needles to said muscle, the electric current having a frequency of about 2500 Hz, the current being applied at about 50 pulses per second with about a 300 microsecond pulse width;

cycling the application of current between periods of stimulation and rest for about 15 minutes, wherein the stimulation period is about 10 seconds and the rest period is about 10 seconds wherein said stimulation period includes a 2 second current ramp up and a 2 second current ramp down.

58. The method of claim 57, wherein the electric current is sufficient to produce a visible muscle contraction.

59. The method of claim 57, further comprising the steps of determining the proximal and distal motor points of said muscle.

60. The method of claim 59, further comprising the application of electro-conductive gel to the skin over said muscle prior to locating the proximal and distal motor points.

61. The method of claim 60, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the distal motor point until a contraction within the muscle is noted and marking said distal motor point.

62. The method of claim 60, further comprising the step of moving an electric probe over the electro-conductive gel in the general region of the proximal motor point until a contraction within the muscle is noted and marking said proximal motor point.

63. The method of claim 60, further comprising the step of removing said electro-conductive gel prior to inserting said needles into said motor points.

64. The method of claim 57, wherein said method is carried out for at least twelve months.

65. The method of claim 57, further comprising the step of administering physical therapy directed to the rehabilitation of the treated muscle.

66. The method of claim 57, wherein the cerebrovascular disease is any ischemic, anoxic, traumatic or infectious injury to the brain.